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FILE LAST UPDATED: 11 May 2005 (20050511/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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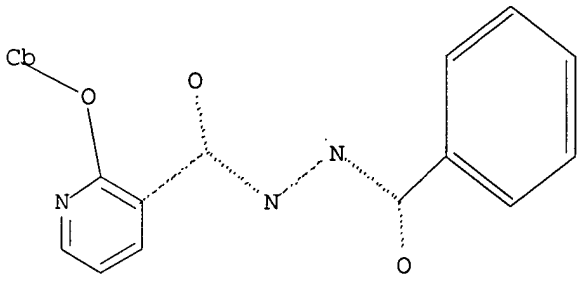
L1 STR



Structure attributes must be viewed using STN Express query preparation.
L3 17 SEA FILE=REGISTRY SSS FUL L1
L4 1 SEA FILE=CAPLUS L3

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L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:868695 CAPLUS
DOCUMENT NUMBER: 137:352786
TITLE: Preparation of substituted N'-(arylcarbonyl)benzhydrazides and N'-(benzylidene)benzhydrazides and analogs as activators of caspases and inducers of apoptosis for use as antitumor agents
INVENTOR(S): Cai, Sui Xiong; Kasibhatla, Shailaja; Drewe, John; Reddy, P. Sanjeeva; Zhang, Han-Zhong
PATENT ASSIGNEE(S): Cytovia, Inc., USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002089745	A2	20021114	WO 2002-US14722	20020510
WO 2002089745	A3	20030227		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003013743	A1	20030116	US 2002-141769	20020510
US 6716859	B2	20040406		
EP 1392219	A2	20040303	EP 2002-731739	20020510
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004186078	A1	20040923	US 2004-816893	20040405
PRIORITY APPLN. INFO.:			US 2001-289803P	P 20010510
			US 2002-141769	A3 20020510
			WO 2002-US14722	W 20020510

OTHER SOURCE(S): MARPAT 137:352786

AB The present invention is directed to substituted N'-(arylcarbonyl)benzhydrazides, N'-(arylcarbonyl)benzylidene hydrazides and analogs thereof, represented by Ar1C(O)NR2NR1C(O)Ar2 and Ar1C(O)NR2N:CR1Ar2 (e.g. N'-(2-phenoxypyridine-3-carbonyl)-3-(trifluoromethyl)benzhydrazide (1)): wherein Ar1 is optionally substituted pyridyl, pyrimidinyl or phenyl; Ar2 is optionally substituted aryl or heteroaryl; and R1 and R2 are independently H, alkyl or cycloalkyl; with the proviso that said compound is other than 4-hydroxybenzoic acid (2-hydroxybenzylidene)hydrazide. The present invention also relates to the discovery that these compds. are activators of caspases and inducers of apoptosis and therefore may be used to induce cell death in a variety of clin. conditions in which uncontrolled growth and spread of abnormal cells occurs. Although the methods of preparation are not claimed, 42 example prepns. are included. Compound 1 and analogs were identified as caspase cascade activators and inducers of apoptosis in solid tumor cells and as antineoplastic compound that inhibits cell proliferation (GI50). Treatment with 1 leads to cell cycle arrest and apoptosis in T-47D cells. Compound 1 and analogs were identified as antineoplastic compound that selectively inhibits the proliferation of breast cancer cells (GI50). Compound 1 was also found to inhibit the clonogenic survival of T47D and MX-1 solid tumor cell lines.

IT **218157-31-4P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-4-nitrobenzhydrazide **218157-36-9P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-3-(trifluoromethyl)benzhydrazide **218157-55-2P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-2-amino-5-nitrobenzhydrazide **474973-26-7P**, N'-[[2-(4-Methylphenoxy)pyridin-3-yl]carbonyl]-3-(trifluoromethyl)benzhydrazide **474973-27-8P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-3-hydroxybenzhydrazide **474973-29-0P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-3-aminobenzhydrazide **474973-30-3P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-4-(trifluoromethyl)benzhydrazide **474973-31-4P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-4-hydroxybenzhydrazide **474973-32-5P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-2-hydroxybenzhydrazide **474973-34-7P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-2-(trifluoromethyl)benzhydrazide **474973-35-8P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-3-fluorobenzhydrazide

474973-36-9P, N'-(2-Phenoxypyridin-3-ylcarbonyl)-3-nitrobenzhydrazide **474973-38-1P**, N'-(2-Phenoxypyridin-3-ylcarbonyl)-2-fluorobenzhydrazide **474973-71-2P**, N'-[2-(4-Methylphenoxy)pyridin-3-ylcarbonyl]-2-hydroxybenzhydrazide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of substituted N'-(arylcarbonyl)benzhydrazides and N'-(benzylidene)benzhydrazides and analogs as activators of caspases and inducers of apoptosis for use as antitumor agents)

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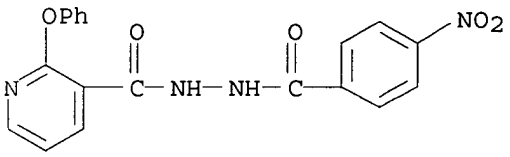

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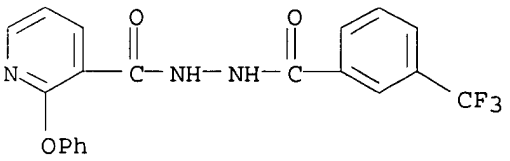

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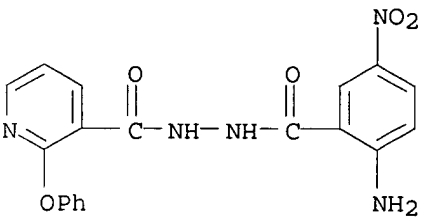

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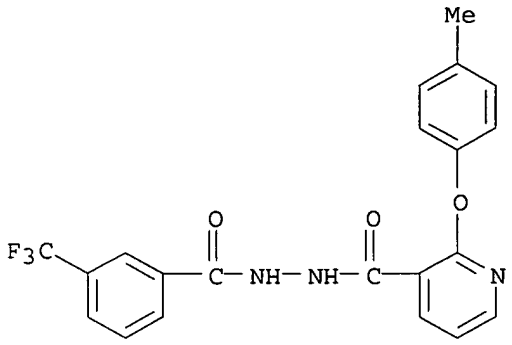

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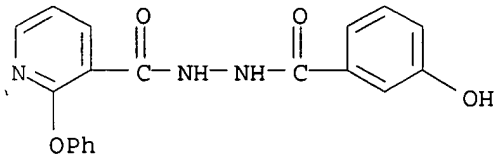

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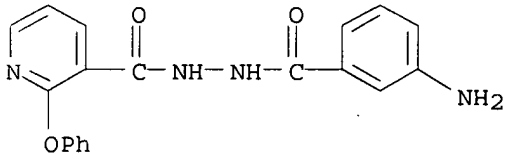

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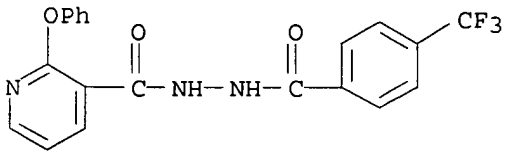
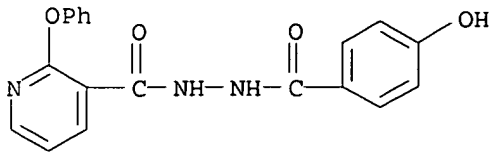


RN 474973-31-4 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-phenoxy-, 2-(4-hydroxybenzoyl)hydrazide (9CI) (CA INDEX NAME)



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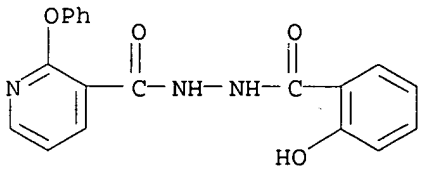

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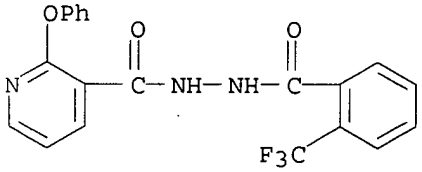

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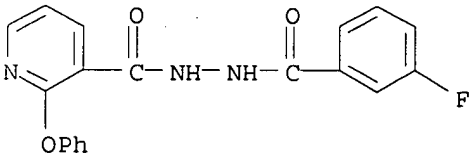

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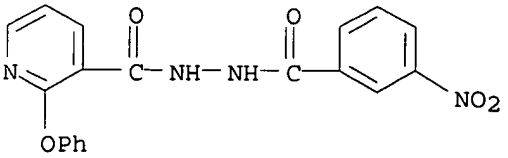

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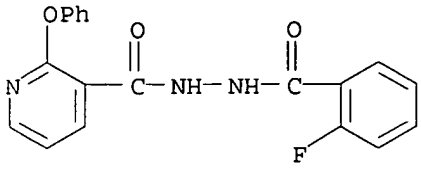
(CA INDEX NAME)



RN 474973-71-2 CAPLUS
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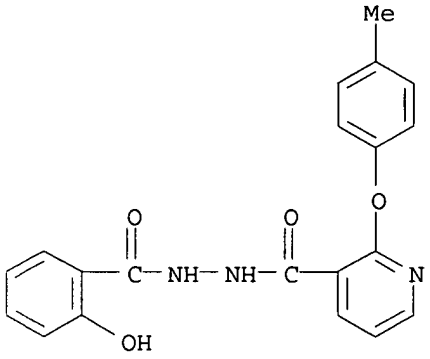

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